PTO/SB/21 (69-04)
Approved for use through 07/31/2006. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
be Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

Application Number

TRANSMITTAL FORM

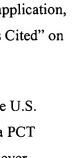
(to be used for all correspondence after initial filing)

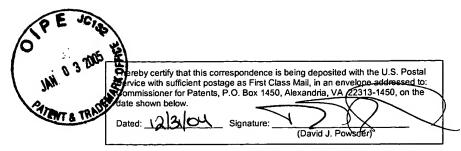
Total Number of Pages in This Submission

	10/6/6,726-Conf. #2945
Filing Date	October 1, 2003
First Named Inventor	Richard D. Thornton
Art Unit	2834
Examiner Name	B. S. Mullins
Attorney Docket Number	102320-0037

	EN	ICLOSURES (Check all	that app	oly)
X Fee Transmittal F	Form	Drawing(s)		After Allowance Communication to TC
X Fee Attache	ed	Licensing-related Papers		Appeal Communication to Board of Appeals and Interferences
Amendment/Repl	у	Petition		Appeal Communication to TC (Appeal Notice, Brief, Reply Brief)
After Final		Petition to Convert to a Provisional Application		Proprietary Information
Affidavits/de	eclaration(s)	Power of Attorney, Revocati Change of Correspondence		Status Letter
Extension of Time	Request	Terminal Disclaimer		X Other Enclosure(s) (please Identify below):
Express Abandon	ment Request	Request for Refund		Return Receipt Postcard (in duplicate)
X Information Disclosure Statement		CD, Number of CD(s)		Check in the amount of \$180.00 IDS Citation by Applicant (2 pages)
Certified Copy of Document(s)	Priority	Landscape Table on	CD	with copies of 8 publications as cited herein
Reply to Missing I		Remarks	•	
	ssing Parts under			
37 CFR 1.5	2 or 1.53			
	SIGNAT	JRE OF APPLICANT, ATTOR	RNEY, OF	RAGENT
Firm Name	TED MECLENA	JENKE FISH N.P.		
Signature	7		Listat o	
Printed name David	d J. Powsner	(
Date	12/31/0	Y	Reg. No.	31,868

Transmittal I hereby certify that this correspondence is being deposited with the big Rostal Service with sufficient postage	as First Class Mail in
an envelope addressed to: Commissioner for Patents, P.O. Fox 1450, Alexandria, VA) 22313-1450, on the da	te shown below.
Dated: 1231 04 Signature: (David J. P	owsner)





Docket No.: 102320-0037

(PATENT)

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of: Richard D. Thornton et al.

Application No.: 10/676,726

Confirmation No.: 2945

Filed: October 1, 2003

Art Unit: 2834

SUSPENDING, GUIDING AND For:

Examiner: B. S. Mullins

PROPELLING VEHICLES USING

MAGNETIC FORCES

INFORMATION DISCLOSURE STATEMENT (IDS)

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Dear Sir:

Pursuant to 37 CFR 1.56, 1.97 and 1.98, the attention of the Patent and Trademark Office is hereby directed to the publications listed on the attached PTO/SB/08. It is respectfully requested that the information be expressly considered during the prosecution of this application, and that the publications be made of record therein and appear among the "References Cited" on any patent to issue therefrom.

This Information Disclosure Statement is filed more than three months after the U.S. filing date, OR more than three months after the date of entry of the national stage of a PCT application, AND after the mailing date of the first Office Action on the merits, whichever occurs first, but before the mailing date of a Final Office Action or Notice of Allowance (37 CFR 1.97(c)).

A copy of each publication on the PTO/SB/08 is attached.

In accordance with 37 CFR 1.97(g), the filing of this Information Disclosure Statement shall not be construed to mean that a search has been made or that no other material information as defined in 37 CFR 1.56(a) exists. In accordance with 37 CFR 1.97(h), the filing of this

음

Application No.: 10/676,726 Docket No.: 102320-0037

Information Disclosure statement shall not be construed to be an admission that the information cited in the statement is, or is considered to be, material to patenability as defined in § 1.56 (b).

Our check in the amount of \$180.00 covering the fee set forth in 37 CFR 1.17(p) is enclosed. The Director is hereby authorized to charge any deficiency in the fees filed, asserted to be filed or which should have been filed herewith (or with any paper hereafter filed in this application by this firm) to our Deposit Account No. 141449, under Order No. 102320-0037.

Dated: 12/31/04

By David J. Powsner

Registration No.: 31,868

Respectfully submitted

NUTTER MCCLENNEN & FISH LLP

World Trade Center West 155 Seaport Boulevard

Boston, Massachusetts 02210-2604

(617) 439-2000

(617) 310-9000 (Fax)

Attorney for Applicant

1372914.1

PTO/SB/08a/b (08-03)
Approved for use through 07/31/2006. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/B/PTO

1

Sheet

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

of

1

Complete if Known						
Application Number	10/676,726-Conf. #2945					
Filing Date	October 1, 2003					
First Named Inventor	Richard D. Thornton					
Art Unit	2834					
Examiner Name	B. S. Mullins					
Attorney Docket Number	102320-0037					

	U.S. PATENT DOCUMENTS							
Examiner Initials*								

	FOREIGN PATENT DOCUMENTS						
Examiner Initials*	Cite No.1	Foreign Patent Document Country Code ³ -Number Kind Code ⁵ (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear		
	BA	EP 1283586 A1	02-12-2003	Ohto, Motomichi		Г	

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. Applicant's unique citation designation number (optional). See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. In the indication of the year of the reign of the Standard ST.16 if possible. Applicant is to place a check mark here if English language Translation is attached.

		NON PATENT LITERATURE DOCUMENTS	
Examiner Initials Cite No.1 Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (in magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, of and/or country where published.			
	CA	Hor, P. J., et al. "Minimization of Cogging Force in a Linear Permanent Magnet Motor", IEEE Transactions on Magnetics, Vol. 34., No. 5, September 1998, pp.3544-3547.	
	СВ	Koh, Chang Seop, "New Cogging-Torque Reduction Method for Brushless Permanent-Magnet Motors", IEEE Transactions on Magnetics, Vol. 39, No. 6, November 2003, pp.3503-3506.	
	CC	Zyl, AW van and CF Landy, "Reduction of Cogging Forces in a Tubular Linear Synchronous Motor by Optimising the Secondary Design", IEEE Africon, pp.689-692 (2002).	
	CD	Zhu, Z.Q., et al., "Reduction of cogging force in slotless linear permanent magnet motors", IEE ProcElectr. Power Appl., Vol. 144, No. 4, July 1997, pp.277-282.	
	CE	Zhu, Z.Q., et al., "Novel Linear Tubular Brushless Permanent Magnet Motor", EMD97, 1-3, September 1997, Conference Publication No. 444, IEE 1997, pp.91-95.	
	CF	Breton, C., et al., "Influence of Machine Symmetry on Reeduction of Cogging Torque in Permanent-Magnet Brushless Motors", IEEE Transactions on Magnetics, Vol. 36, No. 5, September 2000, pp.3819-3823.	
	CG	Li, Touzhu and Gordon Slemon, "Reduction of Cogging Torque in Permanent Magnet Motors", IEEE Transactions on Magnetics, Vol. 24, No. 6, November 1988, pp.2901-2903.	

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Examiner		 Date		
Signature		Considered		

¹Applicant's unique citation designation number (optional). ²Applicant is to place a check mark here if English language Translation is attached.

Attorney Docket No.: 102320-0037

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

Certificate of Mailing under 37 CFR 1.8

Application No. (if known): 10/676,726

Telephone Number

I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to:

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

04

Registration Number, if applicable

Note:

Date

Signature

David J. Powsner

Typed or printed name of person signing Certificate

Each paper must have its own certificate of mailing, or this certificate must identify each submitted paper.

IDS (Citation) by Applicant (with copies of 8 publications as cited herein)

PTO/SB/17 (10-04v2)
Approved for use through 7/31/2006. OMB 0651-0032
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no person are required to respond to a collection of information unless it displays a valid OMB control number.

FFF TDANCMITTAL			Complete if Known				
FEE TRANSMITTAL		Applic	cation	Numb	er 10/676,726-Conf. #2945		
for EV 2005		Filing	Date		October 1, 2003		
for FY 2005			First Named Inventor		ntor Richard D. Thornton		
Effective 10/01/2004. Patent fees are subject to annual revision.			iner Na	ame	B. S. Mullins		
X Applicant claims small entity status. See 37 CFR 1.27		Art Ur	nit		2834		
TOTAL AMOUNT OF PAYMENT (\$) 180.00				cket No	o. 102320-0037		
METHOD OF PAYMENT (check all that apply)					CALCULATION (continued)		
Credit Money	2 /	ADDITIO	ONAL				
X Check Card Order Other None	J. A	ADDITIO	JNAL	FEES			
Deposit Account:			0	F-44.			
Deposit Account 141449	Fee	e Entity Fee	Fee	Entity	-		
Number	Code	(\$)	Code	(\$)	Fee Description Fee Paid		
Deposit Account Nutter McClennen & Fish LLP	1051	130	2051	65	Surcharge – late filing fee or oath		
Name The Director Is authorized to: (check all that apply)	1052	50	2052	25	Surcharge – late provisional filing fee or cover sheet.		
Charge fee(s) indicated below X Credit any overpayments	1053	130	1053	130	Non-English specification		
X Charge any additional fee(s) or any underpayment of fee(s)	1812	2,520	1812	2,520	For filing a request for ex parte reexamination		
Charge fee(s) indicated below, except for the filing fee	1804	920*	1804	920*	Requesting publication of SIR prior to		
to the above-identified deposit account.					Examiner action Requesting publication of SIR after		
	1805	1,840*	1805	1,840*	Examiner action		
FEE CALCULATION	1251	110	2251	55	Extension for reply within first month		
1. BASIC FILING FEE	1252	430	2252	215	Extension for reply within second month		
Large Entity Small Entity Fee Fee Fee Fee Fee Description Fee Paid	1253	980	2253	490	Extension for reply within third month		
Code (\$) Code (\$)	1254	1,530	2254	765	Extension for reply within fourth month		
1001 790 2001 395 Utility filing fee	1255	2,080	2255		Extension for reply within fifth month		
1002 350 2002 175 Design filing fee	1401	340	2401		Notice of Appeal		
1003 550 2003 275 Plant filing fee	1402	340	2402	170	Filing a brief in support of an appeal		
1004 790 2004 395 Reissue filing fee	1403	300	2403		Request for oral hearing		
1005 160 2005 80 Provisional filing fee	1451 1452	1,510 110	1451 2452	55	Petition to institute a public use proceeding Petition to revive – unavoidable		
SUBTOTAL (1) (\$) 0.00	1453	1,370	2453	685	Petition to revive - unintentional		
2. EXTRA CLAIM FEES FOR UTILITY AND REISSUE	1501	1,370	2501	685	Utility issue fee (or reissue)		
Extra Fee from	1502	490	2502	245	Design issue fee		
Claims below Fee Paid Total Claims= x == x	1502	660	2503	330	Plant issue fee		
Independent III	1460	130	1460	130	Petitions to the Commissioner		
Claims							
Multiple Dependent	1807	50	1807	50	Processing fee under 37 CFR 1.17(q)		
Large Entity Small Entity	1806	180	1806	180	Submission of Information Disclosure Stmt 180.00		
Fee Fee Fee Code (\$) Code (\$) Fee Description	8021	40	8021	40	Recording each patent assignment per property (times number of properties)		
1202 18 2202 9 Claims in excess of 20	1809	790	2809	395	Filing a submission after final rejection (37 CFR 1.129(a))		
1201 88 2201 44 Independent claims in excess of 3	1810	790	2810	395	For each additional invention to be		
1203 300 2203 150 Multiple dependent claim, if not paid 1204 88 2204 44 ** Reissue independent claims					examined (37CFR 1.129(b)) Request for Continued Examination (RCE)		
1204 88 2204 44 ** Reissue independent claims over original patent	1801	790	2801	395	Request for expedited examination		
1205 18 2205 9 ** Reissue claims in excess of 20 and over original patent	1802	900	1802	900	of a design application		
and over original paterit	Other	fee (spec	cify)				
**or number previously paid, if greater; For Reissues, see above	*Redu	iced by E	Basic Fi	ling Fee	Paid SUBTOTAL (3) (\$) 180.00		
SUBMITTED BY					(Complete 15 Haakt 1)		
	Regist	ration No	. 24	060	(Complete (if applicable))		
Name (Print/Type) Davited J. Powshe)		ey/Agent)		,868	Telephone (617) 439-2000		
Signature	_				Date 12/3/104		
	ee Tı	ransmit	tal _				
I hereby certify that this correspondence is being deposited	with th	ie U.S.J	Postal	Service	e with sufficient postage as First Class Mail, in		
an envelope addressed to: Commissioner for Patents, P.O.	Dex 1	and the	nberts xe	ıa, VA	32313-1450, on the date shown below.		
Dated: 17 31 09 Signature: Y	Dated: 17 3 Dated: 17 Signature: 17 (David J. Powsner)						